

CLAIMS

1. An optical lens holder comprising a support and a first and a second arm defining a lens holder general plane, first and second arms being relatively movable with regard to each other and each arm having spaced apart first and second end portions and an intermediate portion, the arms being mounted on the support through their first end portions and the second end portions of each arm adapted to accommodate an optical lens during use, whereby an optical lens can be maintained within the first and second arms with its optical axis orthogonal to the general plane of the lens holder through at least one contact point between the lens periphery and each of the first and second arms, wherein at least the second end portion of each arm comprises a material having a dielectric constant at 1 MHz equal to or higher than the dielectric constant of the optical lens material.
2. The optical lens holder of claim 1, further defined as comprising one or two contact points between the lens periphery and each of the first and second lens arms.
3. The optical lens holder of claim 1, wherein the support is not electrically conductive.
4. The optical lens holder of claim 1, wherein the material of the second end portion of each arm has a dielectric constant at 1 MHz of 3.0 or more.
5. The optical lens holder of claim 1, wherein the material of the second end portion of each arm has a specific heat ($\text{kJ kg}^{-1} \text{K}^{-1}$) higher than the specific heat of the optical lens material.
6. The optical lens holder of claim 5, wherein the material of the second end portion of each arm has a specific heat higher than $1.2 \text{ kJ kg}^{-1} \text{K}^{-1}$.
7. The optical lens holder of claim 1, wherein the material of the second end portion of each arm is polyacrylonitrile-butadiene-styrene (ABS), polyoxymethylene homo and copolymers (POMH and POMC) cellulose acetate (CA), cellulose acetate butyrate (CAB), polyamides, polyetherimides (PEI), polymethylmethacrylates (PMMA) or polyaramides.

8. The optical lens holder of claim 1, wherein the second end portion of each arm is either made of or covered with an electroconductive material.
9. The optical lens holder of claim 8, wherein the electroconductive material is a metal.
10. The optical lens holder of claim 9, wherein the metal is aluminum, stainless steel, copper, brass, or gold.
11. The optical lens holder of claim 8, wherein the intermediate portion and first end portion of the arms are made of an electrically insulating material.
12. The optical lens holder of claim 1, wherein the second end portion of each arm is thinner than the intermediate and first end portions in a direction orthogonal to the general plane of the lens holder.
13. The optical lens holder of claim 12, wherein the thickness of the second end portion of each arm ranges from 2 mm to less than 13 mm.
14. The optical lens holder of claim 13, wherein the thickness of the second end portion of each arm ranges from 2 mm to 10 mm.
15. The optical lens holder of claim 1, wherein each of the second end portion of each arm adapted to accommodate an optical lens during use lens comprises a recess having a bottom wall and two inclined sidewalls.
16. The optical lens holder of claim 15, wherein the inclined sidewalls form an angle of at least 120° with the bottom wall.
17. The optical lens holder of claim 1, wherein the support comprises a pair of parallel rails, first and second arms being movable by translation on said pair of rails, relatively to each other.
18. The optical lens holder of claim 1, wherein the second end portion of the second arm is provided with an additional portion adapted to accommodate an optical lens during use, and further comprising a third arm opposite to the first arm and lying

in the lens holder general plane, relatively movable with regard to the second arm and having spaced apart first and second end portions and an intermediate portion, the third arm being mounted on the support through its first end portion and the second end portion of the third arm being provided with a portion adapted to accommodate an optical lens during use, whereby an additional lens can be maintained between the third arm and the second arm with its optical axis orthogonal to the general plane of the lens holder through at least one contact point between its periphery and each of the second arm and the third arm, wherein at least the second end portion of the third arm comprises a material having a dielectric strength of 1 MHz equal to or higher than the dielectric constant of the optical lens material.

19. The optical lens holder of claim 18, wherein the support is not electrically conductive.

20. The optical lens holder of claim 18, wherein the material of the second end portion of each arm has a dielectric constant at 1 MHz of 3.0 or more.

21. The optical lens holder of claim 18, wherein the material of the second end portion of each arm has a specific heat ($\text{kJ kg}^{-1} \text{K}^{-1}$) higher than the specific heat of the optical lens material.

22. The optical lens holder of claim 18, wherein the material of the second end portion of each arm has a specific heat higher than $1.2 \text{ kJ kg}^{-1} \text{K}^{-1}$.

23. The optical lens holder of claim 18, wherein the material of the second end portion of each arm is polyacrylonitrile-butadiene-styrene (ABS), polyoxymethylene homo and copolymers (POMH and POMC) cellulose acetate (CA), cellulose acetate butyrate (CAB), polyamides, polyetherimides (PEI), polymethylmethacrylates (PMMA) or polyaramides.

24. The optical lens holder of claim 18, wherein the second end portion of each arm is either made of or covered with an electrically conductive material.

25. The optical lens holder of claim 24, wherein the electroconductive material is a metal.

26. The optical lens holder of claim 25, wherein the metal is aluminum, stainless steel, copper, brass, or gold.

27. The optical lens holder of claim 24, wherein the intermediate portion and first end portion of the arms are made of an electrically insulating material.

28. The optical lens holder of claim 18, wherein the second end portion of each arm is thinner than the intermediate and first end portions in a direction orthogonal to the general plane of the lens holder.

29. The optical lens holder of claim 28, wherein the thickness of the second end portion of each arm ranges from 2 mm to less than 13 mm.

30. The optical lens holder of claim 29, wherein the thickness of the second end portion of each arm ranges from 2 mm to 10 mm.

31. The optical lens holder of claim 18, wherein each of the second end portions of each arm adapted to accommodate an optical lens during use comprises a recess having a bottom wall and two inclined sidewalls.

32. The optical lens holder of claim 31, wherein the inclined sidewalls form an angle of at least 120° with the bottom wall.

33. The optical lens holder of claim 18, wherein the second end portion of each arm adapted to accommodate an optical lens during use comprises a pair of parallel rails, the first and third arms being movable by translation on said pair of rails.

34. The optical lens holder of claim 1, wherein the second end portion of each arm adapted to accommodate an optical lens during use comprises two identical spaced apart tabs projecting perpendicularly from the first and second arms.

35. The optical lens holder of claim 34, wherein each tab comprises a lens receiving notch at its free end.

36. The optical lens holder of claim 34, wherein first and second arms are movable by translation on the support.

37. The optical lens holder of claim 34, wherein first and second arms are elastically deformable.
38. The optical lens holder of claim 34, wherein only the tabs are elastically deformable.
39. The optical lens holder of claim 34, wherein the material of the second end portion of each arm has a dielectric constant at 1 MHz of 3.0 or more.
40. The optical lens holder of claim 34, wherein the material of the second end portion of each arm has a specific heat ($\text{kJ kg}^{-1} \text{K}^{-1}$) higher than the specific heat of the optical lens material.
41. The optical lens holder of claim 34, wherein the material of the second end portion of each arm has a specific heat higher than $1.2 \text{ kJ kg}^{-1} \text{K}^{-1}$.
42. The optical lens holder of claim 34, wherein the material of the second end portion of each arm is polyacrylonitrile-butadiene-styrene (ABS), polyoxymethylene homo and copolymers (POMH and POMC) cellulose acetate (CA), cellulose acetate butyrate (CAB), polyamides, polyetherimides (PEI), polymethylmethacrylates (PMMA) or polyaramides.
43. The optical lens holder of claim 34, wherein the second end portion of each arm is either made of or covered with an electrically conductive material.
44. The optical lens holder of claim 43, wherein the electroconductive material is a metal.
45. The optical lens holder of claim 44, wherein the metal is aluminum, stainless steel, copper, brass or gold.
46. The optical lens holder of claim 43, wherein the intermediate portion and first end portion of the arms are made of an electrically insulating material.

47. The optical lens holder of claim 34, wherein the second end portion of each arm is thinner than the intermediate and first end portions in a direction orthogonal to the general plane of the lens holder.
48. The optical lens holder of claim 47, wherein the thickness of the second end portion of each arm ranges from 2 mm to less than 13 mm.
49. The optical lens holder of claim 48, wherein the thickness of the second end portion of each arm ranges from 2 mm to 10 mm.
50. The optical lens holder of claim 35, wherein the notch has the shape of a V.
51. The optical lens holder of claim 50, wherein the angle of the V notch is 90° or more.